

THE POTENTIAL IMPACT OF PREVENTION ON THE HEALTH STATUS OF MISSISSIPPIANS

A CONCEPT PAPER PREPARED BY THE MISSISSIPPI STATE BOARD OF HEALTH

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OVERVIEW

One of the primary tenets upon which both the Mississippi Tobacco Settlement and the Mississippi Health Care Trust fund were established is that funds received as a result of the case of the *State of Mississippi v. The American Tobacco Company, et.al.* be applied toward improving the health status and health care of the citizens of the state. Since Mississippi has a long history of health status indicators being affected by the state's education level, socio-economic status, maldistribution of health care providers, and high percentage of uninsured persons, there are many needs that are readily identified in the short-term. As the first discussions on the potential use of the resources available through the Health Expendable Fund were held, it became apparent that there were several areas that were important to both policy makers and the public. Some of those areas include:

- Funding the match for the Child Health Insurance Program
- Funding of the state's newly created trauma care system
- Funding of maternal-child health initiatives in family planning
- Funding of expansions of services through the Medicaid program
- Funding of expansions in mental health and rehabilitation services

The state will soon reach a critical point, however, in the evolution of the fiscal resources derived through the Health Care Trust Fund. Projections for the Health Care Expendable Fund indicate that the state will have access to \$77,039,368 by 2004. It will be important for policy makers to carefully consider the investment of those resources if Mississippi health status is to be affected in any meaningful way through their use. The purpose of this paper is to describe the parameters by which programs, services, and activities should be evaluated as considerations for funding occur.

BACKGROUND

Prevention is basic to health improvement. Treating illness when it occurs may be important to the affected individual, and access to appropriate levels of health care for the purposes of health related interventions is important to the reduction of death and disability from those illnesses. Improvement in overall health status, however, requires attention to preventing diseases and injuries in the first place. Preventive programs offer Mississippians the opportunity to live longer, more productive lives.

In 1999, the leading causes of death in Mississippi were:

- heart diseases (33.1%)

- malignant neoplasms (21.8%)
- cerebrovascular diseases (6.6%)
- accidents (5.8%)
- emphysema and other chronic obstructive pulmonary diseases (4.5%)
- pneumonia and influenza (2.8%)
- nephritis, nephrotic syndrome, and nephrosis (2.2%)
- diabetes mellitus (2.1%)
- septicemia (1.5%)
- Alzheimer's disease (1.2%)

Factors that contribute significantly to these leading causes of death include the following:

- tobacco use
- diet/activity patterns
- alcohol use
- firearms
- sexual behavior
- motor vehicles
- illicit use of drugs
- microbial agents
- toxic agents

Mississippi has the second lowest life expectancy in the nation. National studies suggest that two-thirds of medical costs could be averted if six areas were targeted for intervention. These six areas are stroke, heart disease, occupational injuries, motor vehicle injuries, gunshot wounds, and low birth weight.

A significant way to measure health status is in years of potential life lost before the age of 65. This measure is important because it describes quantitatively the impact of death or disability on an individual's opportunity to contribute to society. In general, risk factors affecting an individual's years of potential life lost can be grouped into four main categories:

- 25% can be attributed to genetics
- 16% can be attributed to the environment in which we live
- 11% can be attributed to the availability of medical care
- 48% can be attributed to behavior and lifestyle choices

Stated another way, many of the risk factors can be altered by changes in the individual's lifestyle choices, by changes in the environment in which the individual lives and works, or by changes in access to preventive clinical services for the individual. Effective prevention strategies encompass three areas: community-based preventive health services, prevention-oriented social and economic health policy; and clinical preventive services.

1.) Community-based preventive health services are those which target public health threats and health promotion for the population as a whole. Public health is responsible for the success in combating death and disability due to communicable diseases such as measles, rubella, pneumonia. In the 21st century, the challenge will be to achieve the same type of success with diseases like HIV/AIDS, chlamydia, and influenza. Community-based preventive health services include monitoring health risks and planning programs and services to promote health. Examples of community preventive health services include health education, regulation of consumer products, workplace and recreational hazards; and

safety monitoring of air, water, and food.

2.) Creating healthy environments for residents across the state may achieve the most gains in health status improvement over time. Familiar topics such as community viability, livability, and economic growth also apply to community health. Elected officials and community leaders can have a tremendous impact on the social, economic, and other public policies that affect health status. Prevention-oriented social and economic health policy development includes legal and regulatory actions; financial incentives that promote healthy lifestyles; and reduction of exposure to harmful substances. Examples of prevention-oriented policies include access to immunizations for school-aged children, prohibition of tobacco use on school property, and worksite health promotion strategies such as walking trails.

3.) Clinical preventive services show the most potential for affecting the health status of Mississippians. There is sound scientific evidence that indicates that clinical preventive services work. Clinical preventive services include immunizations; screening tests such as pap smears and mammography; and counseling related to specific health risks and interventions. Examples of clinical preventive services that work to improve health status include:

- Approximately 21% of illnesses and 10% of deaths due to heart disease can be attributed to elevated cholesterol levels.
- Combining annual clinical breast exams and mammography can reduce breast cancer deaths by more than 30% in women age 50-74. The cost of medical care for a woman whose breast cancer is diagnosed early is one-third to one-half the cost of medical care for a woman whose cancer is diagnosed at a later stage.
- Reported causes of preventable childhood diseases have decreased significantly since the turn of the century. Rubella has been reduced by 99.9%, mumps by 98.4%, and polio virtually eliminated.
- For every \$1.00 spent on publicly funded family planning services, \$4.40 is saved as a result of reducing medical services, welfare, and nutrition services expected during the first two years after an unintended birth.

The United States Preventive Health Services Task Force has identified services most appropriate and most cost-effective according to age, gender, and family and personal risk factors. There is ample scientific evidence that providers of clinical preventive health services who use these guidelines in their practice can impact health status.

GUIDING PRINCIPLES FOR UTILIZATION OF HEALTH CARE EXPENDABLE FUNDS TO IMPROVE MISSISSIPPI'S HEALTH STATUS

A growing body of literature describes a framework of guiding principles that can be used in determining where to achieve the most impact in health status improvement for the amount of money spent on prevention. Frequently asked questions include:

- What is the preventive service, program, or activity that is most effective?
- What does it cost to provide that service, program, or activity?
- Can prevention of a specific disease, illness, or condition save more money than it costs?

As the state of Mississippi considers how best to invest its limited Health Care Expendable Funds, the Board of Health recommends that the following criteria be used to evaluate requests for those expenditures:

- 1.) Programs, services, and activities that are preventive in nature and age-appropriate should be directed first toward the state's children. Examples of these strategies include tobacco, drug, and alcohol prevention; physical activity programs; and injury prevention activities.
- 2.) Programs, services, and activities that are preventive in nature and age-appropriate should be directed secondly toward the state's adult population. Examples of these strategies include tobacco, drug, and alcohol reduction/prevention; worksite and community physical activity activities; and injury prevention programs.
- 3.) Science-based interventions to reduce or eliminate the use of tobacco products should be considered as described the ***Mississippi State Health Plan***.
- 4.) If treatment services are provided with resources from the Health Care Expendable Fund, the appropriate prevention counseling/education and clinical preventive services indicated by science-based research should be required as part of the treatment service package.
- 5.) Wherever practicable, priority should be given to funding programs, services, or initiatives that are targeted toward the community or the population as a whole.
- 6.) Funds should not be used to defray the increasing costs of existing services nor to supplant the costs of services already funded through other sources.

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